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SPECIAL DATA COLLECTION SYSTEM (SDCS) EVENT REPORT,
GULF OF ALASKA, 25 MAY 1975

K. J. Hill, et al

Teledyne Geotech

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SPECIAL DATA COLLECTION SYSTEM EVENT REPORT
Gulf of Alaska, 25 May 1975

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January 1976

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SDCS EVENT REPORT NO. 58

Gulf of Alaska, 25 May 1975

This event report contains seismic data from the Special Data Collection System (SDCS), and other sources for the above event. Published epicenter information from seismic observations is:

	"P" Arrival	Origin Time	Lat.	Long.	m_b	M_s
NORSAR	19:14:46.5	19:04:36	57 N	150 W	5.5	N/A
LASA	19:10:28.4	19:04:48	56.7N	147.6W	5.6	N/A
Hagfors	19:14:53.1	19:04:40	59 N	150 W	5.7	N/A

Using SDCS stations, LASA and NORSAR, the epicenter location and magnitudes become

19:04:30.7 57.3N 150.3W 5.4 5.0

All SDCS stations were operational during this period.

Short-period signals associated with this event were recorded at all SDCS stations, LASA and NORSAR. Horizontal SP channels at all SDCS stations were rotated. NORSAR data were obtained from their bulletin; the TAL transmission was not recoverable.

Long-period signals were recorded at all SDCS stations, ALPA, LASA and NORSAR. Horizontal LP channels at FN-WV and HN-ME were rotated. Rotation of horizontal LP channels at CPSO, WH2YK, and RK-ON could not be accomplished because of signal clipping. Validity of the ALPA, LASA and NORSAR long-period vertical beams is uncertain and horizontal beams were not included because of program recovery problems.

Scaling factors on plots are millimicrons at 1 Hz (not corrected for instrument response) with the exception of LASA. LASA SP scaling factors are millimicrons per inch.

STATION DESCRIPTION

SITE CODE	LOCATION	SITE COORDINATES DEG MN SECS	ELEVATION METERS	INSTRUMENTATION	
				SHORT-PERIOD	LONG-PERIOD
ALPA	Alaska	65 14 00.0 N 147 44 36.0 W	626	None	31300
CPSO	McMinnville, Tennessee	35 35 41.4 N 085 34 13.5 W	574	6480 V 7515 H	SL210 V SL220 H
FN-WV	Franklin, West Virginia	38 32 58.0 N 079 30 47.0 W	910	KS36000	KS36000
LASA	Billings, Montana	46 41 19.0 N 106 13 20.0 W	744	HS10	7505A V 8700C H
HN-ME	Houlton, Maine	46 09 43.0 N 067 59 09.0 W	213	18300	SL210 V SL220 H
NORSAR	Kjeller, Norway	60 49 25.4 N 010 49 56.5 E	379	HS10	7505A V 8700C H
RF-ON	Red Lake, Ontario	50 50 20.0 N 093 40 20.0 W	366	18300	SL210 V SL220 H
WH2YK	White Horse, Yukon	60 41 41.0 N 134 58 02.0 W	853	18300	SL210 V SL220 H

Note: The orientation of the radial instruments at FN-WV is assumed to be 316° + 5° based on empirical data (event recordings). Rotation, where performed, is referenced to this azimuth and may be questionable.

HYPOCENTER DETERMINATION

INPUT FOR EVENT 25 MAY 75
 19:04:48.0 56.700N 147.600W 0KM.

STA.	ARRIVAL	RESIDUALS		DIST.	AZ.
		CALC	REST		
WH2YK	19 06 36.1	- 1	-0.1	8.6	60.2
LAC	19 10 28.4	0.5	0.5	28.6	92.5
RK-CN	19 11 06.5	0.3	0.2	33.0	76.5
CPO	19 13 06.1	-0.5	-0.4	47.5	88.2
FN-WV	19 13 14.6	-0.4	-0.4	48.6	80.8
HN-ME	19 13 19.0	0.1	0.0	49.1	65.6
NAC	19 14 46.5	0.1	0.1	61.3	10.4

67 HERRIN TRAVEL TIME TABLES

ORIGIN	LAT.	LCNG.	DEPTH (KM)	SDV	IT	STA
19:04:33.5	57.323N	150.178W	15. CALC	0.3	4	7
19:04:30.7	57.271N	150.290W	0. REST	0.3	3	7

CALC				
0	0	1	0	0
0	0	0	1	4
0	0	0	0	1
0	0	0	0	0

REST				
0	0	1	0	0
0	0	0	1	4
0	0	0	0	1
0	0	0	0	0

CH12 COVERAGE ELLIPSE; 95 PER CENT CONF..LEVEL, SDV= 1.52
 MAJOR 64.2KM. MINOR 49.3KM. AZ= 34 AREA= 9935 SQ.KM. REST

DATA SUMMARY

INPUT FOR EVENT 25 MAY 75
19:04:48.0 56.700N 147.600W 0RM.

STA.	PHASE	ARRIVAL TIME	INST	PER	MT	MAGNITUDE MB	MS	DIR	DIST
AIPA	LR	19 10 27.0	LPZ	17.0	460.		4.69		8.1
WH2YK	EP	19 06 36.1	SPZ	0.6	9999.				
WH2YK	LR	19 09 32.0	LPZ	23.0	946.		5.03		8.6
IAC	EP	19 10 28.4	AB	1.1	108.	5.33			28.6
LAC	LR	19 24 53.0	LPZ	17.0	961.		5.56		28.6
RK-CN	EP	19 11 06.5	SPZ	0.8	98.	5.39			33.0
RK-CN	LQ	19 24 07.0	LPT	20.0	9999.				
RK-CN	LR	19 24 20.0	LPZ	18.0	26.		4.05		33.0
CFO	EP	19 13 06.1	SPZ	0.5	163.	5.81			47.5
CPC	LR	19 33 09.0	LPZ	18.0	1884.		6.07		47.5
FN-WV	EP	19 13 14.6	SPZ	0.7	89.	5.42			48.6
FN-WV	LQ	19 30 30.0	LPT	18.0	835.				
HN-ME	EP	19 13 19.0	SPZ	0.6	20.	4.79			49.1
HN-ME	LQ	19 30 26.0	LPT	18.0	22.				
HN-ME	LR	19 34 34.0	LPZ	17.0	63.		4.61		49.1
NAC	EP	19 14 46.5	AE	1.0	129.	5.74			61.3
NAC	LR	19 44 27.0	LPZ	20.0	263.		5.33		61.3

ORIGIN	LAT.	LONG.	DEPTH (KM)	MAG	SDV	STA	LP MAG	LP SDV	LP STA
19:04:33.5	57.323N	150.178W	15. CAIC	5.40	0.36	6	5.05	0.7	7
19:04:30.7	57.271N	150.290W	0. REST	5.43	0.37	6	5.05	0.7	7

WH2YK 25 MAY 75

SPZ
616.37 Mμ



SPR
707.68 Mμ



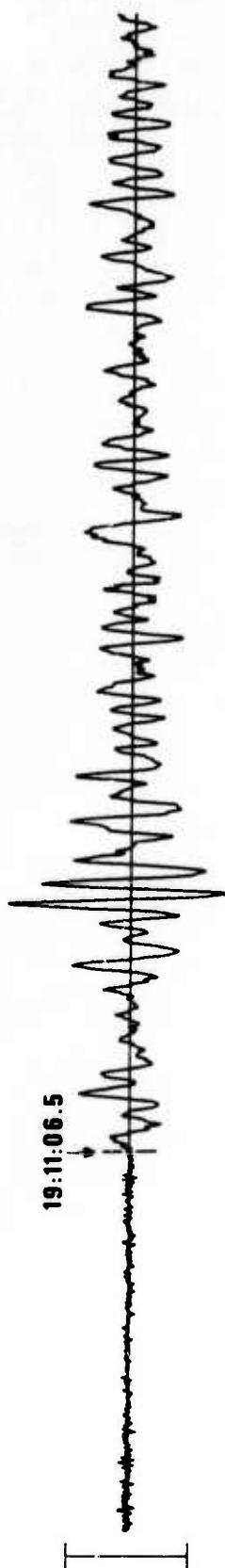
SPT
379.10 Mμ



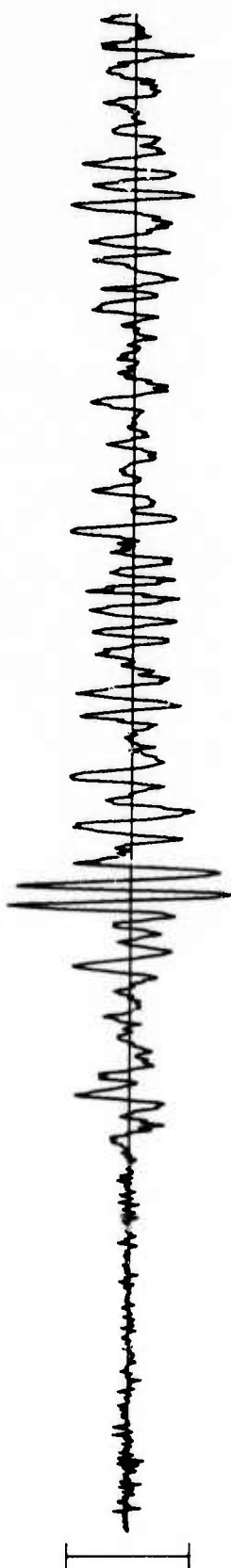
10 SEC

RK-ON 25 MAY 75

SPZ
211.33 Mμ



SPR
113.98 Mμ



SPT
46.46 Mμ



TIME



CPS0 25 MAY 75

SPZ
173.45 Mμ



SPR
69.76 Mμ



SPT
55.12 Mμ



TIME



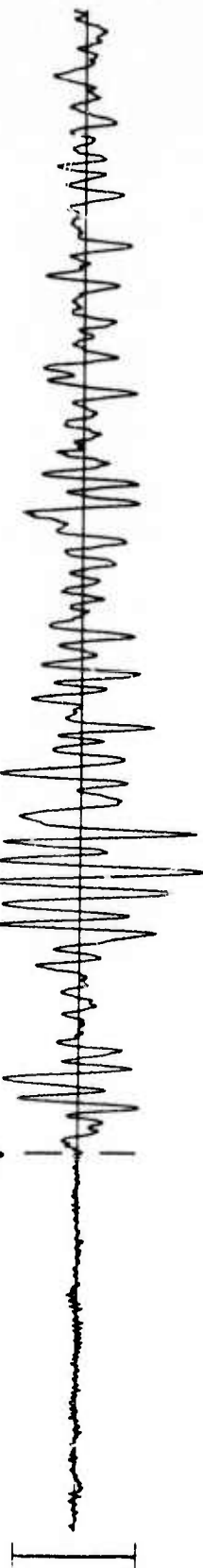
10 SEC

19:13:30

FN-WV 25 MAY 75

19:13:14.6

SPZ
109.28 Mμ



SPR
44.66 Mμ



SPT
31.94 Mμ



TIME



10 SEC

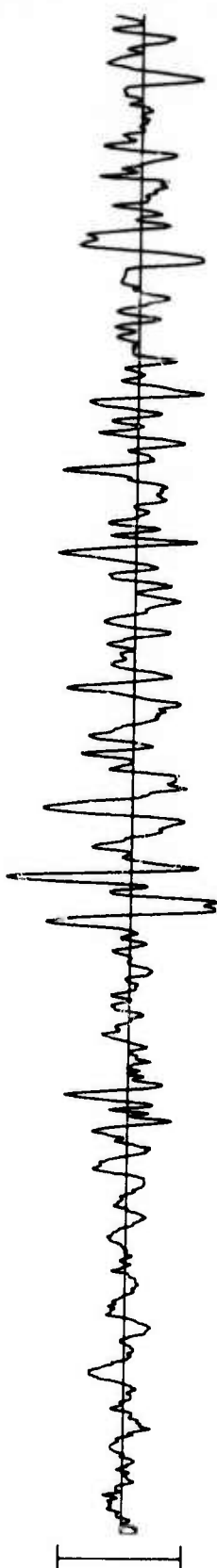
19:13:30

HN-ME 25 MAY 75

SPZ
40.53 Mμ



SPR
26.84 Mμ



SPT
18.24 Mμ



10 SEC

LASA

1 25 MAY 1975

2 19 4 47 56.7N 147.6W 33C C 5.5 15 GULF OF ALASKA

3 19 10 27.8 LAO P 96.3 1.3 12.4 27.2 307.0

EPX 8435

ABN 16

19.10.17.8

BP-B 0.6-2.0 HZ

AB 230

FAB 110

WAB 110

PAB1 120

PAB2 120

PAB3 110

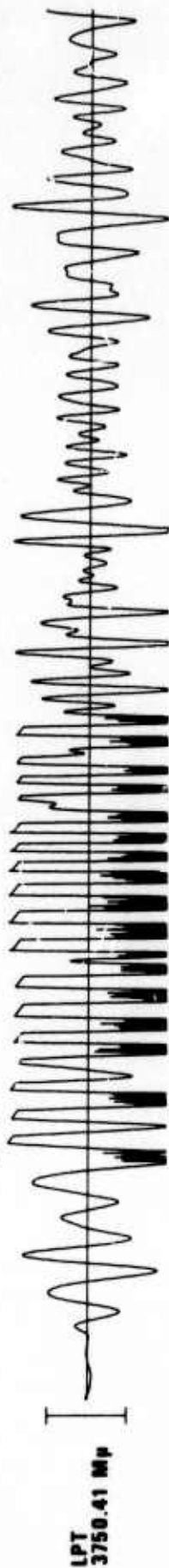
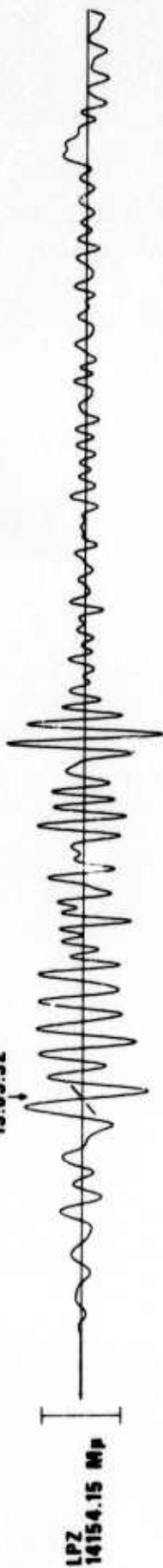
PAB4 100

10 SEC

-10-

WH2YK 25 MAY 75

19:09:32



2 MIN

19:15:00

RK-ON 25 MAY 75

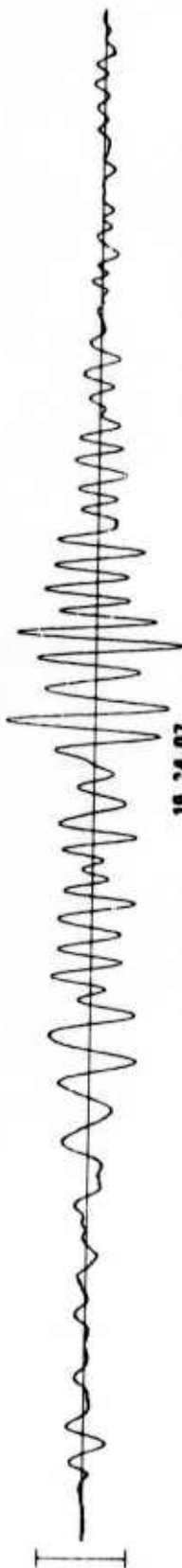
LPZ
217.84 MP

19:24:20



LPR
285.72 MP

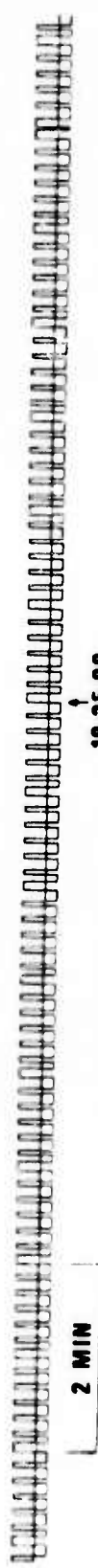
19:24:07



IPT
119.42 MP



TIME



19:25:00

CPS0 25 MAY 75

19:33:09

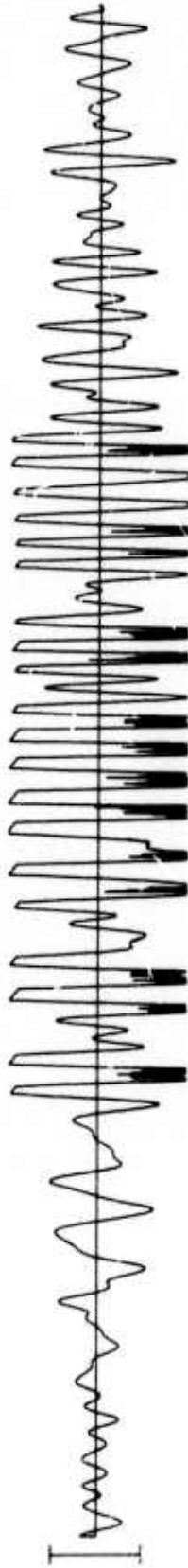
LPZ
15505.29 MHz



LPN
15716.53 MHz



LPE
6082.44 MHz



1/3

TIME



2 MIN

19:35:00

FN-WV 25 MAY 75



19:30:30

TIME



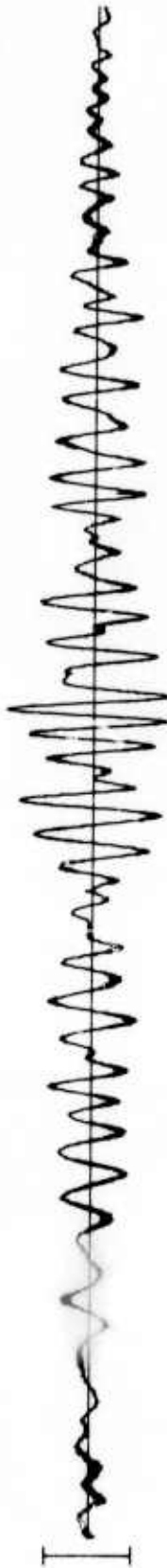
19:33:00

HN-ME 25 MAY 75

19:34:34

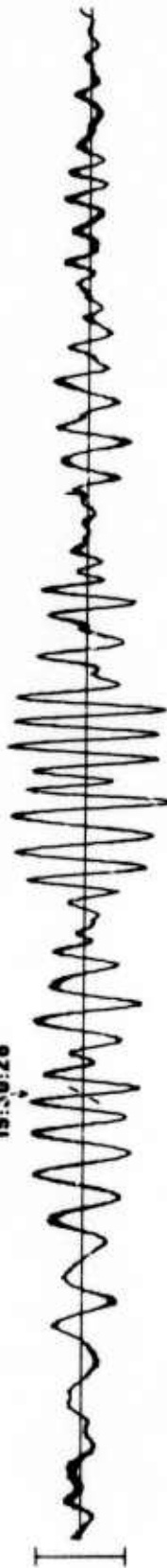


LPR 321.70 MHz



19:30:26

LPT 300.49 MHz



TIME



2 MIN

19:35:00

ARRAY LONG PERIOD VERTICAL BEAMS 25 MAY 75

ALPA

LP VERTICAL
14781.22 Mμ

19:10:27

19:04:03

LASA

1 MIN

19:24:53

LP VERTICAL
18319.93 Mμ

19:13:40

NORSAR

1 MIN

19:44:27

LP VERTICAL
9351.11 Mμ

19:31:15

1 MIN

1/6